

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Julie Straub, Howard Bernstein, Donald E. Chickering, III, Sarwat Khattak, and Greg Randall

Serial No.: 09/706,045

Art Unit: 1617

Filed: November 3, 2000

Examiner: E. Webman

For: *POROUS DRUG MATRICES AND METHODS OF MANUFACTURE THEREOF*

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

DECLARATION UNDER 37 C.F.R. § 1.131

Sir:

We, Julie Straub and Howard Bernstein, hereby declare that:

1. We are co-inventors of the above-identified application.
2. We conceived of and reduced to practice a method of forming microparticles that contain a diagnostic agent, which was subsequently described in U.S. Patent No. 6,565,885 to Tarara et al. This method involves spray drying a feed stock containing the diagnostic agent, a surfactant and a blowing agent. We conceived of and reduced to practice this method prior to September 29, 1997, as demonstrated by the attached copies of pages from a laboratory notebook (Exhibit A).

3. As noted in Exhibit A, the feed stock to the spray drying apparatus contained ammonium acetate, lecithin, (poly(ethylene glycol)-co-poly(lactide-co-glycolide) (75:25), D,L-

1517614v1

1

ACU 109 DIV(2)
077386/00009

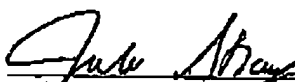
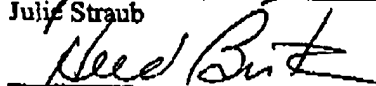
U.S.S.N. 09/706,045
Filed: November 3, 2000
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poly(lactide), and air. This composition was emulsified using a VirTis homogenizer to form an emulsion, which was then spray dried using a small-scale lab spray dryer (see Exhibit A, page 14). The resulting microparticles had diameters ranging from 1-20 microns and were hollow with internal central-like voids containing the air bubble, as demonstrated by transmission electron microscopy (see Exhibit A, page 116). These microparticles were echogenic (see Exhibit A, page 105, injection 7).

4. I declare that all statements made herein of my own knowledge and belief are true and that all statements made on information and belief are believed to be true, and further, that the statements are made with the knowledge that willful false statements are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date: 1-22-04

Date: 1-22-04


Julie Straub

Howard Bernstein

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EXHIBIT A

14 TITLE

Work continued from Page 13

PROJECT NO.

BOOK NO.

Investigator: H. B. Smith Date: 8/29/95
Microscope page #: 51526H Micrograph lot #: 51526HMicroscope Production
Process Room ConditionsRoom Temp: 22°C
Room Humidity: 51.5% RH

Polymer Preparation

Polymer type 1: PEG-PLGA
Source & Lot no.: BPE Lot # 504-14-14
Mass (g): 3.65 g
Polymer type 2: PLGA
Source & Lot no.: BPE Lot # 5103H
Mass (g): 3.61 g
Solvent Type: MeOH
Source & Lot no.: EM Lot no 8706B
Volume: 280 mL
Surfactant Type: Lecithin
Surfactant Conc: 50 mg
Dissolution Media: MeOH
Dissolution Temp: Room temperature
Dissolution Time: 4 Hrs
Exhausted: No
Source & Lot no.: H2O DZ
Amount, g/L: 2.00 g/L
Comments:
Similar common weight in water as follows:
10 g in 4 mL of H₂O. Added to polymer solution.

Aeration Methodology

Concentration: None
Flow type: None
Frequency: None
Power: None
Temperature: None
Time: None
Time until spray: None
Spray type: None
Gas type: None
Gas pressure: None
Temperature: None
Time: None
Time until spray: None
Homogenization: VITEC
Blade type: MSC-2000 ultra-fine generator
Time: 1 minute
Speed: 20,000 RPM
Temperature: 20°C
Time until spray: 1 minute
Comments:

Spray Conditions

Chamber Temp: Room temperature
Nozzle type: 0.7 mm standard nozzle
Gas Pressure: 90 psi
Gas Flow rate: 600 L/H
Orifice type: No orifice type
Feed Pressure: 112 psi
Inlet Temp: 50°C
Start Time: 1:16
Flash Time: 1:18
Mass Recovered: 163-167 = 165
Yield (g): 2.75

Process Conditions

	Run 1/2	Run 1/2	Flash
Chamber Temp:	22°C	22°C	22°C
Flow pressure:	112 psi	112 psi	112 psi

Comments:
Did not get 2nd tube as I had done of 2 previous tubes.

Drying Methodology

Type: VITEC
Total dry time: 24 Hrs
Mass recovered: 163-167 = 165
Yield (g): 2.75
Comments:
100% in 24 Hrs in 100% humidity at 22°C
in 24 Hrs, 100% humidity at 22°C. Placed back in 100% humidity
dried from 100% humidity at 22°C, 24 Hrs.

Storage Methodology

Room Temp: None
Room Humidity: None
Drying Time: None
Storage type: None
Product recovery: None
Yield (g): None
Comments:

SIGNATURE

H. B. Smith

DISCLOSED TO AND UNDERSTOOD BY

G. J. Smith

DATE

WITNESS

Work continued to Page 15

DATE

DATE

80 TITLE

TJU Study For

PROJECT NO

Thames Industrial Laboratory Supplying Forensic Examination (2008) & 2009									
Sample No	Material	Volume	Weight	Volume	Weight	Substance	Substance	Substance	Substance
			kg	kg	kg	kg	kg	kg	kg
Sample 1	Aluminum	24	24	1.00	1.00				
Sample 2	Aluminum	24	24	1.00	1.00				
Sample 3	Aluminum	24	24	1.00	1.00				
Sample 4	Aluminum	24	24	1.00	1.00				
Sample 5	Aluminum	24	24	1.00	1.00				
Sample 6	Aluminum	24	24	1.00	1.00				
Sample 7	Aluminum	24	24	1.00	1.00				
Sample 8	Aluminum	24	24	1.00	1.00				
Sample 9	Aluminum	24	24	1.00	1.00				
Sample 10	Aluminum	24	24	1.00	1.00				
Sample 11	Aluminum	24	24	1.00	1.00				
Sample 12	Aluminum	24	24	1.00	1.00				
Sample 13	Aluminum	24	24	1.00	1.00				
Sample 14	Aluminum	24	24	1.00	1.00				
Sample 15	Aluminum	24	24	1.00	1.00				
Sample 16	Aluminum	24	24	1.00	1.00				
Sample 17	Aluminum	24	24	1.00	1.00				
Sample 18	Aluminum	24	24	1.00	1.00				
Sample 19	Aluminum	24	24	1.00	1.00				
Sample 20	Aluminum	24	24	1.00	1.00				
Sample 21	Aluminum	24	24	1.00	1.00				
Sample 22	Aluminum	24	24	1.00	1.00				
Sample 23	Aluminum	24	24	1.00	1.00				
Sample 24	Aluminum	24	24	1.00	1.00				
Sample 25	Aluminum	24	24	1.00	1.00				
Sample 26	Aluminum	24	24	1.00	1.00				
Sample 27	Aluminum	24	24	1.00	1.00				
Sample 28	Aluminum	24	24	1.00	1.00				
Sample 29	Aluminum	24	24	1.00	1.00				
Sample 30	Aluminum	24	24	1.00	1.00				
Sample 31	Aluminum	24	24	1.00	1.00				
Sample 32	Aluminum	24	24	1.00	1.00				
Sample 33	Aluminum	24	24	1.00	1.00				
Sample 34	Aluminum	24	24	1.00	1.00				
Sample 35	Aluminum	24	24	1.00	1.00				
Sample 36	Aluminum	24	24	1.00	1.00				
Sample 37	Aluminum	24	24	1.00	1.00				
Sample 38	Aluminum	24	24	1.00	1.00				
Sample 39	Aluminum	24	24	1.00	1.00				
Sample 40	Aluminum	24	24	1.00	1.00				
Sample 41	Aluminum	24	24	1.00	1.00				
Sample 42	Aluminum	24	24	1.00	1.00				
Sample 43	Aluminum	24	24	1.00	1.00				
Sample 44	Aluminum	24	24	1.00	1.00				
Sample 45	Aluminum	24	24	1.00	1.00				
Sample 46	Aluminum	24	24	1.00	1.00				
Sample 47	Aluminum	24	24	1.00	1.00				
Sample 48	Aluminum	24	24	1.00	1.00				
Sample 49	Aluminum	24	24	1.00	1.00				
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Sample 82	Aluminum	24	24	1.00	1.00				
Sample 83	Aluminum	24	24	1.00	1.00				
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Sample 91	Aluminum	24	24	1.00	1.00				
Sample 92	Aluminum	24	24	1.00	1.00				
Sample 93	Aluminum	24	24	1.00	1.00				
Sample 94	Aluminum	24	24	1.00	1.00				
Sample 95	Aluminum	24	24	1.00	1.00				
Sample 96	Aluminum	24	24	1.00	1.00				
Sample 97	Aluminum	24	24	1.00	1.00				
Sample 98	Aluminum	24	24	1.00	1.00				
Sample 99	Aluminum	24	24	1.00	1.00				
Sample 100	Aluminum	24	24	1.00	1.00				

Group no	Material	Volume	Surfactant label	Volume hydrophobic (ml.)	Final volume	Detergent Preparation Concentration	Reference label	Intelligence Data Type
1000012	1000-12 Lach	10	1	1.1		X		
1000013	1000-13 Lach	10	1	1.1		X		
1000014	1000-14 Lach	10	1	1.1				
1000015	1000-15 Lach	10	1	1.1				
1000016	1000-16 Lach	10	1	1.1				
1000017	1000-17 Lach	10	1	1.1				
1000018	1000-18 Lach	10	1	1.1				
1000019	1000-19 Lach	10	1	1.1				
1000020	1000-20 Lach	10	1	1.1				
1000021	1000-21 Lach	10	1	1.1				
1000022	1000-22 Lach	10	1	1.1				
1000023	1000-23 Lach	10	1	1.1				
1000024	1000-24 Lach	10	1	1.1				
1000025	1000-25 Lach	10	1	1.1				
1000026	1000-26 Lach	10	1	1.1				
1000027	1000-27 Lach	10	1	1.1				
1000028	1000-28 Lach	10	1	1.1				
1000029	1000-29 Lach	10	1	1.1				
1000030	1000-30 Lach	10	1	1.1				
1000031	1000-31 Lach	10	1	1.1				
1000032	1000-32 Lach	10	1	1.1				
1000033	1000-33 Lach	10	1	1.1				
1000034	1000-34 Lach	10	1	1.1				
1000035	1000-35 Lach	10	1	1.1				
1000036	1000-36 Lach	10	1	1.1				
1000037	1000-37 Lach	10	1	1.1				
1000038	1000-38 Lach	10	1	1.1				
1000039	1000-39 Lach	10	1	1.1				
1000040	1000-40 Lach	10	1	1.1				
1000041	1000-41 Lach	10	1	1.1				
1000042	1000-42 Lach	10	1	1.1				
1000043	1000-43 Lach	10	1	1.1				
1000044	1000-44 Lach	10	1	1.1				
1000045	1000-45 Lach	10	1	1.1				
1000046	1000-46 Lach	10	1	1.1				
1000047	1000-47 Lach	10	1	1.1				
1000048	1000-48 Lach	10	1	1.1				
1000049	1000-49 Lach	10	1	1.1				
1000050	1000-50 Lach	10	1	1.1				
1000051	1000-51 Lach	10	1	1.1				
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1000053	1000-53 Lach	10	1	1.1				
1000054	1000-54 Lach	10	1	1.1				
1000055	1000-55 Lach	10	1	1.1				
1000056	1000-56 Lach	10	1	1.1				
1000057	1000-57 Lach	10	1	1.1				
1000058	1000-58 Lach	10	1	1.1				
1000059	1000-59 Lach	10	1	1.1				
1000060	1000-60 Lach	10	1	1.1				
1000061	1000-61 Lach	10	1	1.1				
1000062	1000-62 Lach	10	1	1.1				
1000063	1000-63 Lach	10	1	1.1				
1000064	1000-64 Lach	10	1	1.1				
1000065	1000-65 Lach	10	1	1.1				
1000066	1000-66 Lach	10	1	1.1				
1000067	1000-67 Lach	10	1	1.1				
1000068	1000-68 Lach	10	1	1.1				
1000069	1000-69 Lach	10	1	1.1				
1000070	1000-70 Lach	10	1	1.1				
1000071	1000-71 Lach	10	1	1.1				
1000072	1000-72 Lach	10	1	1.1				
1000073	1000-73 Lach	10	1	1.1				
1000074	1000-74 Lach	10	1	1.1				
1000075	1000-75 Lach	10	1	1.1				
1000076	1000-76 Lach	10	1	1.1				
1000077	1000-77 Lach	10	1	1.1				
1000078	1000-78 Lach	10	1	1.1				
1000079	1000-79 Lach	10	1	1.1				
1000080	1000-80 Lach	10	1	1.1				
1000081	1000-81 Lach	10	1	1.1				
1000082	1000-82 Lach	10	1	1.1				
1000083	1000-83 Lach	10	1	1.1				
1000084	1000-84 Lach	10	1	1.1				
1000085	1000-85 Lach	10	1	1.1				
1000086	1000-86 Lach	10	1	1.1				
1000087	1000-87 Lach	10	1	1.1				
1000088	1000-88 Lach	10	1	1.1				
1000089	1000-89 Lach	10	1	1.1				
1000090	1000-90 Lach	10	1	1.1				
1000091	1000-91 Lach	10	1	1.1				
1000092	1000-92 Lach	10	1	1.1				
1000093	1000-93 Lach	10	1	1.1				
1000094	1000-94 Lach	10	1	1.1				
1000095	1000-95 Lach	10	1	1.1				
1000096	1000-96 Lach	10	1	1.1				
1000097	1000-97 Lach	10	1	1.1				
1000098	1000-98 Lach	10	1	1.1				
1000099	1000-99 Lach	10	1	1.1				
1000100	1000-100 Lach	10	1	1.1				

[illegible]

Atropine Sulfate					Continued	
Serial No.	Amount	Volume	Volume Inj.	Time	Preparation Preparation Summary	Remarks
1	0.5 mg	10	10	10.0	2-17.2	
2	0.5 mg	10	10	10.0	606.8	

2nd

Samples weighed by Howard in Dry Box
on [redacted] 11/4/11

on [REDACTED] All but the 94/082 and 94/083

Samples sent to Friesburg on 7/4/08 and 7/9/08
on dry ice / gel pack

EVERETT SECURITY PRODUCTIONS CHICAGO 60608

SIGNATURE

DISCLOSED TO AND REQUESTED BY

DATE _____

WITNESS

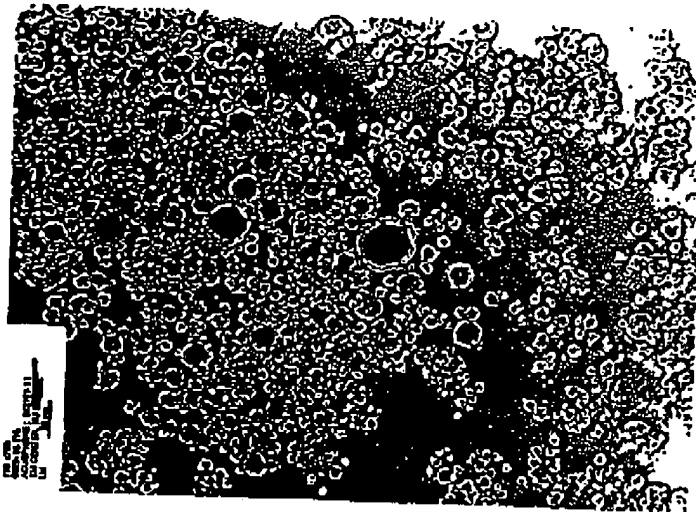
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DATE _____

116

115

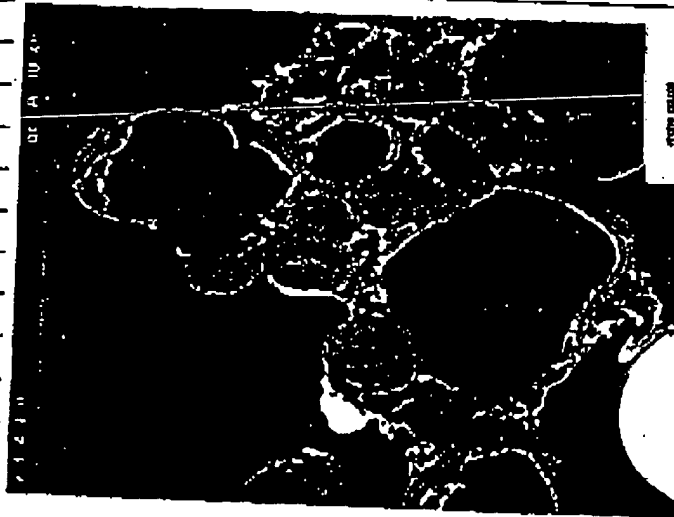


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25



SCIENTIFIC EMBRY PRODUCTIONS CHICAGO 60606 Made in USA

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Henry T. Paul

DATE

WITNESS

Work continued to Page 117

DATE

DATE

106 TITLE

PROJECT NO

STATE OF MINNESOTA

Accuracy

Notes

All samples will be prepared by vortexing and sonication.

All samples will be prepared in 20 mL centrifuge vials. Empty 20 mL centrifuge vials will be brought.

Solids (0.5%) will be used instead of water for the bulk stream in the pumping system. Preweighed amount of 16.5 g of P400 will be brought out, and placed in 1000 mL with water in a beaker. Two each beaker will be sent to TPA. A total of 20 P400 vials will be brought.

Vehicle 1 = 0.5% P400 20. 5% glycerol ← reversed

Vehicle 2 = 0.5% P400 20. 5% glycerol, uncoated

- 1) System essentially same as [redacted] as per permit, except some saline in tank.
- 2) Vehicle 2 (VF) was used.
- 3) Yungus was used in the study.
- 4) After injection of sample, sample was stirred, flow rate was then increased to 500-800 mL/min until echogenic material detected by the oscilloscope. Flow rate then dropped to 100-200 mL/min.
- 5) The later window moved dramatically with each pulse.
- 6) Tubing was manipulated to remove bubbles. At least once (prior to injection) this resulted in change of alignment. Also that one detected later, the transducer was reattached.
- 7) Cleaning procedures: (1) water pumped to remove all material, then saline pumped in (2) water emptied, saline added + pumped through.

(2) System pumped by saline pumped in

MICROBIC BATTERY PRODUCTIONS CHICAGO ILLINOIS 60611

Work continued to Page

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WITNESS

DATE

DATE

TITLE:

Work: 000000

105

8/84/105

Asaphone

Confidential

Sequence #	Sample Information (Name, etc.)	Sequence Preparation	Biogeochemistry Initial	Biogeochemistry Over Time	Significance
1	Albany 0.6	NA (P. 0.6)	not - 1.5mm		NO
2	Albany 0.5	NA (P. 0.5)	not - 1.5mm		NO
3	Albany 0.3	NA (P. 0.3)	not - 1.5mm		NO
4	Albany (F. 0.4)	NA (P. 0.4)	not - 1.5mm		NO
5	VP-12	V/S2/V	not - 1.5mm		NO
6	VP-12	V/S2/V	not - 1.5mm		NO
7	VP-12	V/S2/V	not - 1.5mm		NO
8	VP-12	V/S2/V	not - 1.5mm		NO
9	VP-12	V/S2/V	not - 1.5mm		NO
10	VP-12	V/S2/V	not - 1.5mm		NO
11	VP-12	V/S2/V	not - 1.5mm		NO
12	VP-12	V/S2/V	not - 1.5mm		NO
13	VP-12	V/S2/V	not - 1.5mm		NO
14	VP-12	V/S2/V	not - 1.5mm		NO
15	VP-12	V/S2/V	not - 1.5mm		NO
16	VP-12	V/S2/V	not - 1.5mm		NO
17	VP-12	V/S2/V	not - 1.5mm		NO
18	VP-12	V/S2/V	not - 1.5mm		NO
19	VP-12	V/S2/V	not - 1.5mm		NO
20	VP-12	V/S2/V	not - 1.5mm		NO
21	VP-12	V/S2/V	not - 1.5mm		NO
22	VP-12	V/S2/V	not - 1.5mm		NO
23	VP-12	V/S2/V	not - 1.5mm		NO
24	VP-12	V/S2/V	not - 1.5mm		NO
25	VP-12	V/S2/V	not - 1.5mm		NO
26	VP-12	V/S2/V	not - 1.5mm		NO
27	VP-12	V/S2/V	not - 1.5mm		NO
28	VP-12	V/S2/V	not - 1.5mm		NO
29	VP-12	V/S2/V	not - 1.5mm		NO
30	VP-12	V/S2/V	not - 1.5mm		NO
31	VP-12	V/S2/V	not - 1.5mm		NO
32	VP-12	V/S2/V	not - 1.5mm		NO
33	VP-12	V/S2/V	not - 1.5mm		NO
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35	VP-12	V/S2/V	not - 1.5mm		NO
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39	VP-12	V/S2/V	not - 1.5mm		NO
40	VP-12	V/S2/V	not - 1.5mm		NO
41	VP-12	V/S2/V	not - 1.5mm		NO
42	VP-12	V/S2/V	not - 1.5mm		NO
43	VP-12	V/S2/V	not - 1.5mm		NO
44	VP-12	V/S2/V	not - 1.5mm		NO
45	VP-12	V/S2/V	not - 1.5mm		NO
46	VP-12	V/S2/V	not - 1.5mm		NO
47	VP-12	V/S2/V	not - 1.5mm		NO
48	VP-12	V/S2/V	not - 1.5mm		NO
49	VP-12	V/S2/V	not - 1.5mm		NO
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61	VP-12	V/S2/V	not - 1.5mm		NO
62	VP-12	V/S2/V	not - 1.5mm		NO
63	VP-12	V/S2/V	not - 1.5mm		NO
64	VP-12	V/S2/V	not - 1.5mm		NO
65	VP-12	V/S2/V	not - 1.5mm		NO
66	VP-12	V/S2/V	not - 1.5mm		NO
67	VP-12	V/S2/V	not - 1.5mm		NO
68	VP-12	V/S2/V	not - 1.5mm		NO
69	VP-12	V/S2/V	not - 1.5mm		NO
70	VP-12	V/S2/V	not - 1.5mm		NO
71	VP-12	V/S2/V	not - 1.5mm		NO
72	VP-12	V/S2/V	not - 1.5mm		NO
73	VP-12	V/S2/V	not - 1.5mm		NO
74	VP-12	V/S2/V	not - 1.5mm		NO
75	VP-12	V/S2/V	not - 1.5mm		NO
76	VP-12	V/S2/V	not - 1.5mm		NO
77	VP-12	V/S2/V	not - 1.5mm		NO
78	VP-12	V/S2/V	not - 1.5mm		NO
79	VP-12	V/S2/V	not - 1.5mm		NO
80	VP-12	V/S2/V	not - 1.5mm		NO
81	VP-12	V/S2/V	not - 1.5mm		NO
82	VP-12	V/S2/V	not - 1.5mm		NO
83	VP-12	V/S2/V	not - 1.5mm		NO
84	VP-12	V/S2/V	not - 1.5mm		NO
85	VP-12	V/S2/V	not - 1.5mm		NO
86	VP-12	V/S2/V	not - 1.5mm		NO
87	VP-12	V/S2/V	not - 1.5mm		NO
88	VP-12	V/S2/V	not - 1.5mm		NO
89	VP-12	V/S2/V	not - 1.5mm		NO
90	VP-12	V/S2/V	not - 1.5mm		NO
91	VP-12	V/S2/V	not - 1.5mm		NO
92	VP-12	V/S2/V	not - 1.5mm		NO
93	VP-12	V/S2/V	not - 1.5mm		NO
94	VP-12	V/S2/V	not - 1.5mm		NO
95	VP-12	V/S2/V	not - 1.5mm		NO
96	VP-12	V/S2/V	not - 1.5mm		NO
97	VP-12	V/S2/V	not - 1.5mm		NO
98	VP-12	V/S2/V	not - 1.5mm		NO
99	VP-12	V/S2/V	not - 1.5mm		NO
100	VP-12	V/S2/V	not - 1.5mm		NO

Asaphone

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Sequence #	Sample Information (Name, etc.)	Sequence Preparation	Biogeochemistry Initial	Biogeochemistry Over Time	Significance
1	VP-12	V/S2/V	not - 1.5mm		NO
2	VP-12	V/S2/V	not - 1.5mm		NO
3	VP-12	V/S2/V	not - 1.5mm		NO
4	VP-12	V/S2/V	not - 1.5mm		NO
5	VP-12	V/S2/V	not - 1.5mm		NO
6	VP-12	V/S2/V	not - 1.5mm		NO
7	VP-12	V/S2/V	not - 1.5mm		NO
8	VP-12	V/S2/V	not - 1.5mm		NO
9	VP-12	V/S2/V	not - 1.5mm		NO
10	VP-12	V/S2/V	not - 1.5mm		NO
11	VP-12	V/S2/V	not - 1.5mm		NO
12	VP-12	V/S2/V	not - 1.5mm		NO
13	VP-12	V/S2/V	not - 1.5mm		NO
14	VP-12	V/S2/V	not - 1.5mm		NO
15	VP-12	V/S2/V	not - 1.5mm		NO
16	VP-12	V/S2/V	not - 1.5mm		NO
17	VP-12	V/S2/V	not - 1.5mm		NO
18	VP-12	V/S2/V	not - 1.5mm		NO
19	VP-12	V/S2/V	not - 1.5mm		NO
20	VP-12	V/S2/V	not - 1.5mm		NO
21	VP-12	V/S2/V	not - 1.5mm		NO
22	VP-12	V/S2/V	not - 1.5mm		NO
23	VP-12	V/S2/V	not - 1.5mm		NO
24	VP-12	V/S2/V	not - 1.5mm		NO
25	VP-12	V/S2/V	not - 1.5mm		NO
26	VP-12	V/S2/V	not - 1.5mm		NO
27	VP-12	V/S2/V	not - 1.5mm		NO
28	VP-12	V/S2/V	not - 1.5mm		NO
29	VP-12	V/S2/V	not - 1.5mm		NO
30	VP-12	V/S2/V	not - 1.5mm		NO
31	VP-12	V/S2/V	not - 1.5mm		NO
32	VP-12	V/S2/V	not - 1.5mm		NO
33	VP-12	V/S2/V	not - 1.5mm		NO
34	VP-12	V/S2/V	not - 1.5mm		NO
35	VP-12	V/S2/V	not - 1.5mm		NO
36	VP-12	V/S2/V	not - 1.5mm		NO
37	VP-12	V/S2/V	not - 1.5mm		NO
38	VP-12	V/S2/V	not - 1.5mm		NO
39	VP-12	V/S2/V	not - 1.5mm		NO
40	VP-12	V/S2/V	not - 1.5mm		NO
41	VP-12	V/S2/V	not - 1.5mm		NO
42	VP-12	V/S2/V	not - 1.5mm		NO
43	VP-12	V/S2/V	not - 1.5mm		NO
44	VP-12	V/S2/V	not - 1.5mm		NO
45	VP-12	V/S2/V	not - 1.5mm		NO
46	VP-12	V/S2/V	not - 1.5mm		NO
47	VP-12	V/S2/V	not - 1.5mm		NO
48	VP-12	V/S2/V	not - 1.5mm		NO
49	VP-12	V/S2/V	not - 1.5mm		NO
50	VP-12	V/S2/V	not - 1.5mm		NO
51	VP-12	V/S2/V	not - 1.5mm		NO
52	VP-12	V/S2/V	not - 1.5mm		NO
53	VP-12	V/S2/V	not - 1.5mm		NO
54	VP-12	V/S2/V	not - 1.5mm		NO
55	VP-12	V/S2/V	not - 1.5mm		NO
56	VP-12	V/S2/V	not - 1.5mm		NO
57	VP-12	V/S2/V	not - 1.5mm		NO
58	VP-12	V/S2/V	not - 1.5mm		NO
59	VP-12	V/S2/V	not - 1.5mm		NO
60	VP-12	V/S2/V	not - 1.5mm		NO
61	VP-12	V/S2/V	not - 1.5mm		NO
62	VP-12	V/S2/V	not - 1.5mm		NO
63	VP-12	V/S2/V	not - 1.5mm		NO
64	VP-12	V/S2/V	not - 1.5mm		NO
65	VP-12	V/S2/V	not - 1.5mm		NO
66	VP-12	V/S2/V	not - 1.5mm		NO
67	VP-12	V/S2/V	not - 1.5mm		NO
68	VP-12	V/S2/V	not - 1.5mm		NO
69	VP-12	V/S2/V	not - 1.5mm		NO
70	VP-12	V/S2/V	not - 1.5mm		NO
71	VP-12	V/S2/V	not - 1.5mm		NO
72	VP-12	V/S2/V	not - 1.5mm		NO
73	VP-12	V/S2/V	not - 1.5mm		NO
74	VP-12	V/S2/V	not - 1.5mm		NO
75	VP-12	V/S2/V	not - 1.5mm		NO
76	VP-12	V/S2/V	not - 1.5mm		NO
77	VP-12	V/S2/V	not - 1.5mm		NO
78	VP-12	V/S2/V	not - 1.5mm		NO
79	VP-12	V/S2/V	not - 1.5mm		NO
80	VP-12	V/S2/V	not - 1.5mm		NO
81	VP-12	V/S2/V	not - 1.5mm		NO
82	VP-12	V/S2/V	not - 1.5mm		NO
83	VP-12	V/S2/V	not - 1.5mm		NO
84	VP-12	V/S2/V	not - 1.5mm		NO
85	VP-12	V/S2/V	not - 1.5mm		NO
86	VP-12	V/S2/V	not - 1.5mm		NO
87	VP-12	V/S2/V	not - 1.5mm		NO
88	VP-12	V/S2/V	not - 1.5mm		NO
89	VP-12	V/S2/V	not - 1.5mm		NO
90	VP-12	V/S2/V	not - 1.5mm		NO
91	VP-12	V/S2/V	not - 1.5mm		NO
92	VP-12	V/S2/V	not - 1.5mm		NO
93	VP-12	V/S2/V	not - 1.5mm		NO
94	VP-12	V/S2/V	not - 1.5mm		NO
95	VP-12	V/S2/V	not - 1.5mm		NO
96	VP-12	V/S2/V	not - 1.5mm		NO
97	VP-12	V/S2/V	not - 1.5mm		NO
98	VP-12	V/S2/V	not - 1.5mm		NO
99	VP-12	V/S2/V	not - 1.5mm		NO
100	VP-12	V/S2/V	not - 1.5mm		NO

Stacy
Rena
TJ
on

SECURITY: UNCLASSIFIED PRODUCTIONS: CHICAGO (MM-SS) 1054

Work continued to Page

SIGNATURE

DISCLOSED TO AND UNDERSTOOD BY

DATE

WITNESS

DATE

DATE